From the Cooperative Agreements for Screening, Brief Intervention, Referral and Treatment (SBIRT), Request for Applications (RFA)
Center for Substance Abuse Treatment[1]

Resources for Implementing Screening, Brief Intervention, Referral, and Treatment

http://www.samhsa.gov/Grants06/RFA/TI_06_002_sbirt.aspx

Background

For purposes of this cooperative agreement, CSAT will not require a specific methodology for determining need, implementing systems change, or introducing SBIRT within its continuum of care. CSAT is not requiring specific protocols for carrying out the individual activities involved (viz., screening, brief intervention, referral, assessment, patient placement, and brief treatment). CSAT is not recommending a specific approach for developing collaboration among participating generalist and specialist providers. Rather, the applicant is required to describe and justify the strategies that will be implemented under the proposed cooperative agreement project and to describe the methods that will be used to assess need, eliminate barriers to access, and to carry out each of these activities. Wherever possible, the applicant should provide a description of any prior services or research projects on which their proposed approach is based.

In order to introduce some commonality in responses, we will present a brief overview of terminology and anticipated issues and provide illustrative references that can serve as resources for proposal development and project implementation. The resources and references provided are not presented as an inclusive listing that must be used in proposal preparation.

Terminology

From the scientific and policy perspectives, there have been two distinct approaches for responding to the social and health problems posed by drug abuse and addiction—the **clinical**, or diagnostic, approach and the **environmental**, or problems, approach (Gerstein and Green, 1993; Institute of Medicine, 1990). Over the years, drug policy has been shaped by these perspectives, shifting between punitive and rehabilitative strategies for reducing consumption of illicit drugs and the criminal behaviors associated with illicit drug use (Gerstein and Harwood, 1990).

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The two perspectives have led to differences in how persons receiving and seeking treatment are characterized in developing resource allocation and financing schemes and create potential problems in consolidating funding streams to carry out SBIRT. The financing of treatment for substance use problems has differed from the rest of health care financing in part because the public sector through block and categorical grants has been the major payer for services (e.g., Horgan and Merrick, 2001). The shifting perspectives and orientations of the policymakers and legislators have also influenced these systemic perspectives (Gerstein and Harwood, 1990). Criminal justice funding, originally through the Federal Law Enforcement Administration block and categorical grant programs (more recently, the Office of Justice Programs and the Office of Juvenile Justice programs) created a public safety orientation, while funds from the poverty programs (e.g., the Social Services Block grant) created a welfare orientation. On the other hand, health insurance, like Blue Cross and Medicaid created a medical orientation. All three orientations have co-existed in the categorical grant and block grants directly targeted at treatment of substance use disorders, notably, the Substance Abuse Prevention and Treatment Block Grant, which attempts to integrate the perspectives, creating what has been labeled the mixed medical and social model orientation (IOM, 1990; Reader and Sullivan, 1992). For example, Medicaid and other forms of health insurance require a clinical diagnosis and a determination of medical necessity for admission to treatment, while the Substance Abuse Prevention and Treatment Block Grant does not. The lack of common terminology has created problems in understanding who receives what services for treatment of substance use disorders with what outcomes (Coffey et al., 2001)

Developing the policies and data for studying utilization and designing policies to increase access to clinically appropriate treatment requires use of common terms with clear definitions, starting with identifying the conditiions for which treatment is needed. Diagnosis is the process of identifying and labeling specific diseases; diagnostic criteria for substance abuse and dependence disorders reflect the consensus of researchers and clinicians as to precisely which patterns of behavior or physiological characteristics constitute symptoms of these conditions. (Babor, 2001; NIAAA, 2002; NIDA, 1997) Agreement on diagnosis in this field is relatively new, and the definitions and techniques for establishing diagnoses are evolving. Having a consistent set of diagnostic criteria allows clinicians to plan treatment and monitor treatment progress; enables policymakers, and planners to ensure the availability of needed treatment resources in each community; helps health care insurers and other funders to decide whether treatment will be reimbursed; and allows patients access to medical insurance coverage.

As noted in the RFA, in accord with the National Drug Control Strategy's new approach to using diagnosis as the criterion for determining the size of the treatment gap, the need for treatment is discussed in terms of the categories used in the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; 1994).[2] DSM-IV includes a category called "Substance Related Disorders" that is divided into two major subcategories, Substance Induced Disorders and Substance

[2] For a discussion of the methodology change, see Epstein, 2002. Substance Dependence, Abuse, and Treatment: Findings from the 2000 National Household Survey on Drug Abuse, Appendix C: Measurement of Dependence, Abuse, Treatment, and Treatment Need.

Use Disorders. The focus of this program is on that part of the continuum of care that addresses treatment of Substance Use Disorders and not the treatment of Substance Induced Disorders, namely Substance Intoxication and Substance Withdrawal. Patients manifesting signs of intoxication, withdrawal symptoms, and other physical problems that require emergency care or urgent action would be managed in other components of the generalist or specialist treatment systems, stabilized and medically cleared before being screened for presence of a Substance Use Disorder (VHA/DoD, 2001).

Substance Use Disorders are further differentiated by type of drug primarily involved (e.g., amphetamine, alcohol, cocaine, marijuana/cannabis). DSM-IV is the diagnostic approach primarily used in this county for determining treatment eligibility, developing substance-specific treatments, and conducting epidemiological and clinical research.

Based on the DSM-IV, *Substance Abuse Disorder* is characterized by the presence of social or health-related problems related to the person's consistent pattern of substance use. *Substance* D*ependence* Disorder is characterized by a cluster of recognizable symptoms, including physical withdrawal, loss of control over use episodes, and continued use of substance despite knowledge of having a physical or psychological problem that is likely caused by substance.

The World Health Organization has also developed diagnostic criteria for the purpose of compiling statistics on all causes of death and illness, including those related to substqance abuse or dependence. These criteria are published as the *International Classification of Diseases* (ICD). In the current revision, ICD-10, substance dependence is defined in a way that is similar to the DSM-IV. The diagnosis focuses on an interrelated cluster of psychological symptoms, such as craving; physiological signs, such as tolerance and withdrawal; and behavioral indicators , such as the use of alcohol to relieve withdrawal discomfort. However, in a departure from the DSM-IV, rather than include the category "abuse," ICD-10 includes the concept of "harmful use." This category was created so that health problems related to alcohol and other drug use would not be underreported. Harmful use implies alcohol or drug use that causes either physical or mental damage in the absence of dependence (Babor, 2001). The ICD classification approach has served as the basis for much of the research underlying the use of brief interventions.

Review of the literature and discussions with practitioners and State Substance Abuse Authorities (SSAs) established that, while most of the research establishing the effectiveness of this approach has focused on alcohol use problems and disorders and has used the **problems** approach rather than the **clinical** approach, there is an emerging body of research and clinical experience that supports use of the SBIRT approach for nondependent persons who are experiencing problems related to the use of illicit drugs, particularly for marijuana use disorders (e.g., Stephens et a., 1994; Samet et al., 1996; Sullivan et al., 1997: Babor et al. 2002; Barry, 1999; Bernstein et al., 1997; Zweben and Fleming, 1999; Roffman, 1999; Dennis, et al. 2002a and b; Conrod et al., 2000; Baker et al. 2001; Babor, et al., 2002; Blow, 1999: Fleming, 2002; Kelso, 2002; WHO ASSIST Working Group, 2002).

While the effort to develop brief interventions for nondependent drug users has not been as extensive as that for persons with alcohol problems, there have been several precedents. Early in the effort to develop a national drug strategy, the Treatment Subcommittee of the Cabinet Committee on Drug Abuse Prevention, Treatment and Rehabilitation in responding to pressure on the limited availability of treatment slots, recommended the establishment of distinct, lower cost "Alternative Educational Programs" (Bloom, 1977). These "alternatives to treatment or incarceration were recommended as the vehicle for "treating the casual and recreational marijuana users" who were being "inappropriately" referred to drug abuse treatment centers, most often by the criminal justice system through diversion efforts (Domestic Council Drug Abuse Task Force, 1975). The stated goal was to allow the specialty drug abuse treatment system to focus on the "abusers of high risk drugs." Marijuana, at that time, was considered a low risk drug.

The model programs presented by NIDA were short-term, inexpensive educational programs with both didactic presentations and group discussions. These alternative educational programs became the forerunners of many of the intervention programs that still exist in the gray area between prevention and treatment—often having statutory authorization as diversion programs.

There is evidence that a number of States have already begun to introduce protocols for screening and brief intervention for both alcohol and drug use problems and disorders into their continuum of care (e.g., New York OASAS, 1996; Harrison et al., 1996; Hartwell et al., 1996: Kroutil et al., 1997).[3] Yet, in contrast to more traditional treatment services, early intervention services are often not specifically defined or regulated (IOM, 1990; Klitzner, et al., 1992). For purposes of this announcement, early intervention services (brief interventions) are those treatment procedures designed for persons who are exhibiting some problems associated with alcohol or other drug use but whose problems are not deemed serious enough to warrant treatment within a specialist setting (i.e., those nondependent persons at high risk of or already diagnosed with a substance abuse disorder). Early intervention services are sometimes identified as pre-treatment interventions (Blow, 1998) or clinical preventive services (U.S. Preventive Task Force, 1998) or indicated preventive interventions (Haggerty and Mrazek, 1994). The goal of early intervention is to prevent the problems from becoming more serious, and to promote total abstinence from alcohol and other illegal drugs. Early intervention could

[3] A number of other States have included similar characterizations for differentiating intervention and treatment in their rules or planning efforts (e.g., Louisiana, Minnesota, Florida, North Carolina, Connecticut, Vermont, Washington). For example, South Dakota has defined its approach as part of the regulations governing licensure of treatment facilities: "A facility that provides Early Intervention and Outpatient Services is a nonresidential facility that provides direct supportive client contact, indirect or collateral client contact, community information and liaison services. The program also provides formally planned counseling services to those persons harmfully affected by alcohol or drugs and who have been determined not to be in need of or accepting of structured outpatient or residential services." http://legis.state.sd.us/rules/rules/6716A.htm#67:16:11:03.04. Apparently some States (e.g., Florida) define intervention as both a treatment and non-treatment activity.

include an assessment of substance use and related problems, individual counseling provided by a health care practitioner, or participation in school-based or community-based educational or counseling programs designed to deter further substance use and promote healthier alternatives.

CSAT's approach to early intervention through screening, brief intervention, and brief treatment is to be differentiated from the parallel efforts within CSAP. While both approaches use the same technologies, CSAP funded early intervention programs address persons who are at high risk of developing a substance use disorder through indicated preventive interventions,[4] while CSAT funded programs address persons who would achieve a diagnosis of substance use disorder. CSAP and CSAT are working together to jointly assist the States in implementing the entire continuum of care as presented in the Institute of Medicine report, **Reducing Risks for Mental Disorders** as modified by CSAT for the National Treatment Plan (CSAT, 2000). The IOM report recommends that the traditional public health classifications of primary, secondary, and tertiary prevention be replaced by new classification system for the continuum of care:

> **Universal preventive interventions:** targeted to the general public or a whole population group that has not been identified on the basis of individual risk. The intervention is desirable for everyone in that group. Universal interventions have advantages in terms of cost and overall effectiveness for large populations.
>
> **Selective preventive interventions:** targeted to individuals or a subgroup of the population whose risk of developing a mental or substance use disorder is significantly higher than average. The risk may be imminent or it may be a lifetime risk. The basis may be biological, psychological, or environmental.
>
> **Indicated preventive interventions:** targeted to high risk individuals who are identified as having minimal but detectable signs or symptoms foreshadowing a mental or substance use disorder, or biological markers indicating predisposition for a disorder, but who do not meet accepted clinical diagnostic criteria at the time.
>
> **Treatment interventions:** therapeutic services designed to reduce the length of time a disorder exists, halt its progression of severity, or if not possible, increase the length of time between acute episodes. There are two categories of treatment interventions: (1) case finding; and (2) standard treatment for the known

[4] The CSAP strategy for this activity had previously been designated as "Problem Identification and Referral Programs" that may screen, identify and serve persons who could be diagnosed as having a substance use disorder as well as those individuals who could be classified as non-users, at risk users, and at high risk users. Many, if not all, of the programs are operated as primary prevention programs and use a problem count (e.g., the AUDIT) to classify those persons served rather than a clinical diagnosis. This difference in perspectives leads them to intervene (i.e., provide advice and feedback; counsel with) persons who may be in either an at risk category or with a diagnosis, without always clearly differentiating between the two classes. In clinical settings, when delivered by licensed health practitioners, such activities would be considered a clinical preventive service.

disorders, which includes interventions to reduce the likelihood of future co-occurring disorders.

Maintenance interventions: services, generally supportive, educational, and/or pharmacological in nature, provided on a long-term basis to individuals who have met DSM-IV diagnostic criteria, are considered in remission, and whose underlying illness continues. The two components of maintenance interventions are (1) patient's compliance with long-term treatment to reduce relapse and recurrence and (2) the provision of after-care services, including rehabilitation. (Haggerty and Mrazek, 1994:23-24)

Rather than negating the public health approach to defining primary, secondary, and tertiary prevention as some have held, the IOM model can be seen as complementary, expanding the public heath approach. The newer IOM model can be seen as actually further differentiating the public health construct of primary prevention into the categories of universal, selected, and indicative interventions, and the public health constructs of secondary and tertiary prevention into the categories of treatment and maintenance, respectively. The early intervention activities overlap the boundaries between primary prevention (indicated prevention) and secondary prevention (case finding).

In filling out the treatment portion of a State's continuum of care, the purpose of screening for substance use problems is to identify those persons who should receive either a brief intervention for a Substance Abuse Disorder or referral for additional screening and assessment to establish whether more intensive treatment for a Substance Use Disorder (SUD) is needed. The persons screened *may* or *may not* meet the DSM-IV criteria for a substance abuse or dependence disorder (American Psychiatric Association, 1994). If they do not, but are deemed to be at risk users, than the same technology is employed as a clinical preventive service (or indicated preventive intervention). In practice, the activities are the same. However, the distinction is important for developing financing policies, for conducting epidemiological research and for tracking treatment access, appropriateness, utilization, and effectiveness.

Since diagnosis has not always been used as a criterion for admission to treatment in publicly funded treatment programs, States and service providers will need to introduce and agree upon a uniform approach to diagnosis as part of their implementation of this program and efforts to provide sustained funding for SBIRT, particularly through public and private health insurance mechanisms.

Integrating the Diagnostic and Problems Approaches

As noted, the DSM-IV term *substance use disorders* can be used to refer to a range of substance-related problems that require treatment. A spectrum of substance use disorders, from least to most serious, which encompasses the problems approach used in developing screening protocols for the use of brief interventions might be represented as follows:

Problem Use or At Risk Use | Substance Abuse Disorder | Substance Dependence Disorder

In general, *problem or at-risk use* means use that exceeds an established threshold. The threshold may be defined in different ways depending on the source, the population, and other local conditions. The majority of work for developing such classifications in order to identify persons who could benefit form a brief intervention has been carried out for alcohol use problems and disorders. For example, the WHO manuals for introducing screening and brief intervention into primary care present general guidelines for assigning "risk levels" based upon AUDIT scores, that conform the spectrum above and lay out a spectrum of intervention and treatment responses.

Table 1: AUDIT Guidelines for Determining Intervention Strategy[5]

Risk Level	Intervention	Audit Score
I	Education	0-7
II	Simple Advice	8-15
III	Simple Advice plus Brief Counseling and Continued Monitoring	16-19
IV	Referral to Specialist for Diagnostic Evaluation and Treatment	20-40

The risk levels are used as a basis for making clinical judgments to tailor interventions to the particular conditions of individual patients, assuming that higher AUDIT scores are generally indicative of more severe levels of risk and problems or dependence. The guidelines are to serve as a starting point for an appropriate intervention. If a patient is not successful at the initial level of intervention, than the protocol calls for follow-up to develop a plan to step the patient up to the next level of intervention. (Babor and Higgins-Biddle, 2001; Babor et al., 2001)

This approach is similar to that used for other screening tests, such as the Drug Abuse Screening Test (DAST).

Table 2: DAST Guidelines for Determining Intervention Strategy[6]

Score	***Degree of Problems Related to Drug Abuse***	***Suggested Action***
0	No Problems Reported	None At This Time
1-2	Low Level	Monitor, Reassess At A Later Date
3-5	Moderate Level	Further Investigation
6-8	Substantial Level	Intensive Assessment

[5] Based on Babor and Higgins-Biddle (2001) Brief Intervention For Hazardous And Harmful Drinking: A Manual for Use in Primary Care, Box 2, p.12

[6] Based on Skinner HA (1982).

These classification systems reflect the different patterns of drug use consumption and problems that call for differential societal responses that reflect differences in the drug (substance) used, the history, frequency, and amount used, as well as the existence and severity of associated physical, emotional, and social consequences of use. The Institute of Medicine committee that carried out a Congressionally mandated study of the evolution, effectiveness and financing of public and private drug treatment systems (Gerstein and Harwood, 1990) described a four level classification system reflecting these patterns that was a starting point in developing their initial estimates of the need for treatment, a model that was adapted for creating national estimates of the treatment gap. Table 3 depicts individual drug use patterns and interventions associated with each pattern of use. Each stage of use elicits a different type of societal response. The definitions for the categories are:

> **Use**: Low or infrequent doses: experimental, occasional, "social." Damaging consequences are rare or minor.
>
> **Abuse**: Higher doses and/or frequencies: sporadically heavy, intensive. Effects are unpredictable, sometimes severe.
>
> **Dependence**: High, frequent doses: compulsion, craving, withdrawal. Severe consequences are very likely.

Table 3: Individual Drug Use Patterns and Intervention Strategies[7]

Stage	**Category of Use**	**Use Pattern**	**Reason**	**Consequences**	**Societal Responses**	
	Abstinence				Prevention programs	
Early/light	Use	Low or infrequent doses	Experimental, occasional, "social"	Minor	Prevention programs	Mild sanctions
Late/heavy	Abuse	Higher doses and/or frequencies	Sporadically heavy	Unpredictable, sometimes severe		
Late/heavy	Dependence	High, frequent doses	Compulsion, craving, withdrawal	Severe	Treatment programs	Severe sanctions

In the SBIRT approach, all persons are first screened and referred to the appropriate sector (community generalist, non-specialty or specialty) for intervention or treatment. Persons with a mild or moderate level of substance use problems would most often be

[7] Based on Figure 3-1. A model of individual drug history, Gerstein and Harwood (1990:61).

offered a brief intervention in the non-specialty primary health care, criminal justice, educational, employment, or social service setting. Referral to intensive treatment in the specialty sector would be made only for those whose life situation is so unstable that prognosis is poor without specialty treatment or for those who fail to respond to an initial brief intervention--the stepped care approach (Sobell and Sobell, 1999, 2000).

Persons with substantial or severe problems would be referred from screening to specialty sequential assessment and treatment where problem and personal assessment would lead to assignment to more differentiated types of treatment modalities and levels of care, using a formal set of patient placement criteria.

Recent efforts have attempted to integrate the problem and diagnostic approaches, using both the research literature and clinical experience to refine the methods for screening, referring, and treating person's based on these concepts (e.g., ASAM, 2000; APA, 1994; VHA/DoD, 2001). A possible model for this integration is presented in Table 4. The model also attempts to integrative the public health and IOM models for defining the continuum of care.

Using either the problems approach or the clinical approach, it is well recognized that within each community there is a spectrum of persons with substance use-related problems. In keeping with recent summaries of the international research literature, it is estimated that the majority of adults are either abstainers or light or moderate nondependent users of alcohol or illicit drugs, and experience either no problems or mild or moderate substance use-related problems (estimated at approximately 75%). There is a small but often highly visible minority of heavy, dependent users with major substance-related problems (estimated at approximately 5%). In between these extremes, there is a sizeable group of persons (20%) who may be drinking or using illicit drugs substantially or heavily and who have encountered substantial or severe problems related to their substance use. The concepts have been more difficult to address for illicit drugs, since any use could be seen as "abuse" because of potentially legal consequences. As will be noted below, treatment is not necessarily the best societal response for these nondependent persons, but a brief intervention, early in their use career may well be.

These findings suggest that the continuum of care in each community must include a spectrum of primary, secondary, and tertiary prevention responses that parallels the spectrum of problem associated with use and that the diagnostic and problems approaches must be reconciled to ensure introduction of evidence based clinical protocols (NIDA, 1999). Research on effectiveness of specific approaches continues, but there is sufficient evidence available to lead to the policy conclusion that more widespread SBIRT efforts will decrease the medical and social costs of illicit drug use.

Table 4: Integrating the Problem and Diagnostic Perspectives--A Possible Model

Problems	**Risk Category or Diagnosis**	**Intervention Strategy**	**Exposures\ Sessions**	**Follow-up Suggested: Track: use, risk factors, and problems**
No problems	No risk Or low risk	Universal prevention	Variable	Periodic re-screen: every year
Mild problems	At low risk	Clinical preventive service Selective prevention-brief advice	1-2	Periodic re-screen: every year
Moderate problems	At high risk	Clinical preventive service Indicated prevention Brief advice Brief intervention	1-2	Periodic re-screen every 6 months for 3 years, every year if no relapse
Moderate problems	Substance Abuse Disorder (DSM-IV, Axis I)	Brief advice Brief intervention Brief treatment	1-2 1-5 6-20	Periodic re-screen and booster session: every 3 months for 2 years, every 6 months for 2 years, every year if no relapse
Substantial problems	Substance Dependence Disorder (DSM-IV, Axis I)	Sequential assessment; match to clinically appropriate consumption and quality of life treatment strategies	21-60+	Periodic re-screen: every 3 months for 2 years, every 6 months for 2 years, every year if no relapse
Severe problems	Substance Dependence Disorder (DSM-IV, Axis I)	Sequential assessment; match to clinically appropriate consumption and quality of life treatment strategies	Variable; Based on individual response to treatment	Periodic re-screen: every 3 months for 2 years, every 6 moths for 2 years, every year if no relapse

Using a method similar to that employed by Skinner and his colleagues in the original development of screening for establishing brief interventions as a valid technology, persons can be classified into four graded categories of drug and alcohol use problems, each of which should lead to a different treatment or intervention strategy being employed and to a different set of resource requirements (See Table 4.):

Mild level of substance use problems. Use is light or moderate; symptoms are rated as mild or moderate; dependence is probably not present or, if present, is

psychological rather than physical; life problems related to use are rated as absent, mild, or moderate.

Moderate level of substance use problems. Use is medium, substantial, or heavy; symptoms are rated as moderate; psychosocial problems related to use are likely and rated as moderate; psychological dependence may still be characteristic, but there are increasing signs of physical dependence, such as withdrawal symptoms; related life problems are rated as mild and/or moderate.

Substantial level of substance use problems. Use is substantial or heavy; symptoms are rated as substantial; physical dependence is likely; physical disorders, mental disorders, and psychosocial problems related to substance use are rated as moderate and/or substantial.

Severe level of substance use problems. Use is heavy; symptoms are rated as substantial and/or severe; physical dependence is highly pronounced; life problems are rated as substantial and/or severe; serious physical disorders and mental disorders related to use, such as liver disease, are likely.

As presented in Table 4, persons can also be classified as either nondependent users (those with mild or moderate problems) or dependent users (those with substantial and severe problems) and also be diagnosed as meeting the clinical criteria for a DSM-IV abuse disorder or a dependence disorder. The act of diagnosis shifts the nature of the services from prevention to treatment.

In measuring the size of the treatment gap and developing strategies to increase access to clinically appropriate treatment, ONDCP and SAMHSA want the States to focus on the resources needed for improved screening, intervention, referral and treatment for substance use disorders in order to increase the resources devoted to identifying and intervening with the nondependent users as part of the generalist health care system. States should be able to provide for a similar linkage between whatever classification system your State is using and the DSM-IV categories in the protocol.

Resources for Implementing Screening

In health care, screening refers to a process designed to identify people who have, or who are at risk of having, an illness or disorder. The purpose of screening is to target persons for treatment, so as to reduce the long-term morbidity and mortality related to the condition. In addition, by intervening early and raising the individual's level of concern about the risk factors and substance-related problems, it is expected that screening for drug and alcohol problems in community settings can itself reduce subsequent use.

Two types of screening procedures are typically used. The first type includes self-report questionnaires and structured interviews; the second, clinical laboratory tests that can detect biochemical changes associated with excessive alcohol consumption or illicit drug use.

There are a variety of screening instruments available. As noted, the majority of studies and implementation efforts have focused on screening for alcohol problems, with the CAGE and the AUDIT being the most commonly used screening tools. The DAST has also been used in conjunction with the AUDIT in several projects, where there has been an effort to implement this approach for persons with or at risk of a Substance Use Disorder. Several new instruments have been developed, but not yet rigorously tested to assess harmful use of either alcohol or drugs (e.g., the CAGE-D, the ASSIST, the TCUDS, the GAIN-QS, the PDES).

> Brown, RL and Rounds LA. 1995. Conjoint screening questionnaires for alcohol and other drug abuse: criterion validity in a primary care practice. *Wisconsin Medical Journal*, 94, 135-140.
>
> Brown R, Leonard T, Saunders LA, et al. (1997). A two-item screening test for alcohol and other drug problems. *Journal of Family Practice*, 44, 151-160.

A bibliography containing descriptions and evaluations of various interview, questionnaire, and laboratory test screening approaches is available from Project Cork

> Project Cork. 2002. *CORK Bibliography: Screening Tests.* 2001-2002, 58 Citations.
> http://www.projectcork.org/bibliographies/data/Bibliography_Screening_Tests.html

Screening instruments have been developed or modified for use with different target populations, notably adolescents, offenders within the criminal justice system, and welfare recipients, women, and the elderly. Several have been translated into other languages and have been evaluated for cultural sensitivity. Again, CSAT is not requiring a specific instrument or protocol, but choice of instruments or laboratory tests must be justified.

It is well recognized that screening instruments used with adolescents must be developmentally appropriate, valid and reliable, and practical for use in busy medical settings. One example of a brief substance abuse screening instrument recently developed specifically for use with adolescents is the CRAFFT test.

> Knight JR, Sherritt L, Shrier LA, Harris SK, Chang G. 2002. Validity of the CRAFFT substance abuse screening test among adolescent clinic patients. *Arch Pediatr Adolesc Med*. 156(6): 607-14.

Additional screening tests and procedures targeted at adolescents, including the PDES and the GAIN-QS, are described in these publications:

> Winters KC. 1992. Development of an adolescent alcohol and other drug abuse screening scale: Personal Experience Screening Questionnaire. *Addict Behav*. 17(5): 479-90.

Winters KC. 1999. **Screening and Assessing Adolescents For Substance Use Disorders**. Treatment Improvement Protocol (TIP) Series 31 DHHS Publication No. (SMA*)* 99-3282.

Winters KC. 1999. **Treatment of Adolescents With Substance Use Disorders.** Treatment Improvement Protocol (TIP) Series 32. DHHS Publication No. (SMA*)* 99-3283.

Winters KC. 2001. Assessing adolescent substance use problems and other areas of functioning: State of the art. In: PM Monti, SM. Colby, and TA. O'Leary (eds). **Adolescents, Alcohol, and Substance Abuse: Reaching Teens Through Brief Interventions**. New York, Guilford Publications, Inc., pp. 80-108.

Dennis ML 1998. **Global Appraisal of Individual Needs (GAIN) manual: Administration, Scoring and Interpretation**, (Prepared with funds from CSAT TI 11320). Bloomington IL: Lighthouse Publications. http://www.chestnut.org/LI/GAIN/GAIN_QS/index.html

Martino S, Grilo CM, and Fehon DC 2000. Development of the drug abuse screening test for adolescents (DAST-A). *Addictive Behaviors* 25(1): 57-70.

Screening tests and procedures targeted at the elderly are described in these publications:

Blow, F.C. Consensus Panel Chair. 1998. **Substance Abuse Among Older Adults**. Treatment Improvement Protocol (TIP) Series 26. DHHS Publication No. (SMA) 98-3179.

Blow FC and Barry KL. 1999-2000. Advances in alcohol screening and brief intervention with older adults. *Advances in Medical Psychotherapy*. 10:107-124

Screening tests and procedures targeted at persons in the criminal justice system are described in these publications:

Inciardi JA Consensus Panel Chair 1994. **Screening and Assessment for Alcohol and Other Drug Abuse Among Adults in the Criminal Justice System.** Treatment Improvement Protocol (TIP) Series 7. DHHS Publication No. (SMA) 94B2076

Peters, RH, Greenbaum, PE, Steinberg, ML, Carter, CR, Ortiz, MM, Fry, BC, Valle, SK. 2000. Effectiveness of screening instruments in detecting substance use disorders among prisoners. *Journal Substance Abuse Treatment*: 18(4): 349-58.

Simpson DD. 2001. Core set of TCU forms. Fort Worth: Texas Christian University, Institute of Behavioral Research. www.ibr.tcu.edu.

Efforts are also ongoing to develop methods for screening within the dual diagnosis population:

> Maisto SA, Carey MP, Carey KB, Gordon CM, and Gleason JR. 2000. Use of the AUDIT and the DAST-10 to identify alcohol and drug use disorders among adults with a severe and persistent mental illness. *Psychological Assessment* 12(2): 186-192.

Resources for Implementing Brief Interventions and Brief Treatments

There are now a variety of approaches that have been labeled as Brief Interventions (BI) and Brief Treatments (BT). Examples of approaches that address specific drugs are the Cannabis Youth Treatment protocol and the Adult Marijuana Treatment protocol, developed through CSAT funded testing of models originally developed through NIDA and NIAAA research.

Brief intervention and brief treatment strategies range from relatively unstructured advice-giving, to counseling and formalized feedback, to formal structured manuals for the number, duration, frequency, and content of sessions. Many of the protocols are based on behavioral self-control training, motivational interviewing, and cognitive-behavioral psychotherapy.

One of the most extensive efforts to attempt to conceptualize and differentiate Brief Interventions and Brief Treatments (and Long Term Treatments) was CSAT's TIP 34: **Brief Interventions and Brief Therapies for Substance Abuse**, published in 1999. The Consensus Panel for CSAT TIP #34 describes the two activities as follows:

> ***Brief Intervention***
>
> Brief interventions are those practices that aim to investigate a potential problem and motivate an individual to begin to do something about his substance abuse, either by natural, client-directed means or by seeking additional substance abuse treatment.
>
> ***Brief Treatment (Therapy)***
>
> Brief treatment (therapy) is a systematic, focused process that relies on assessment, client engagement, and rapid implementation of change strategies. Brief therapies usually consist of more (as well as longer) sessions than brief interventions. The duration of brief therapies is reported to be anywhere from 1 session (Bloom, 1997) to 40 sessions (Sifneos, 1987), with the typical therapy lasting between 6 and 20 sessions. Twenty sessions usually is the maximum because of limitations placed by many managed care organizations. Any therapy may be brief by accident or circumstance, but the focus of this TIP is on *planned* brief therapy. The therapies described here may involve a set number of sessions or a set range (e.g., from 6 to 10 sessions), but they always work within a time limitation that is clear to both therapist and client.

In distinguishing between Brief Intervention and Brief Treatments, Zweben and Fleming (1999) characterize Brief Interventions as a low-cost, effective treatment alternative for alcohol and drug problems that use time-limited, self-help and preventive strategies to promote reductions in the case of nondependent clients, and in the case of dependent clients to facilitate their referral to specialized treatment programs. The primary goal in all cases is to increase motivation for behavior change. Brief interventions do not teach specific cognitive or behavioral skills, nor do they attempt to change a client's social environment.

Some researchers, practitioners, and policy analysts have suggested that the differentiation should be made on the basis of the number of sessions, with Brief Intervention typically lasting 1-3 sessions, not more than 5 sessions, and Brief Treatment typically consisting of 6 or more sessions but not more than 20 sessions. Others have limited Brief Interventions to only 1 or 2 sessions and Brief Treatments to no more than 6 sessions.

Brief interventions and brief therapies may be thought of as elements on a continuum of care, but they can be distinguished from each other according to differences in outcome goals. Interventions are generally aimed at motivating a client to perform a particular action (e.g., to enter treatment, change a behavior, think differently about a situation), whereas therapies are used to address larger concerns (such as altering personality, maintaining abstinence, or addressing long-standing problems that exacerbate substance abuse).

A bibliography containing descriptions and evaluations of various brief intervention and brief treatment approaches is available from Project Cork

> Project Cork. 2002. *CORK Bibliography: Brief Treatment in Substance Abuse*: *2000-2002*, 78 Citations. http://www.projectcork.org/bibliographies/data/Bibliography_Brief_Treatment.html

Resources for Protocol Development

Treatment Improvement Protocols (TIPs) are best practice guidelines for the treatment of substance abuse. CSAT draws on the experience and knowledge of clinical, research, and administrative experts to produce the TIPs, which are distributed to a growing number of facilities and individuals across the country. Examples of protocols, screening instruments, and methods for carrying out activities required to implement the SBIRT program can also be found in several Treatment Improvement Protocols (TIPS) published by CSAT. TIPS can be accessed on the internet through the Treatment Improvement Exchange at: http://www.treatment.org/Externals/tips.html

Barry KL Consensus Panel Chair. 1999. **Brief Interventions And Brief Therapies for Substance Abuse.** Treatment Improvement Protocol (TIP) Series 34. DHHS Publication No. (SMA) 99-3353.

Blow FC. Consensus Panel Chair. 1998. **Substance Abuse Among Older Adults**. Treatment Improvement Protocol (TIP) Series 26. DHHS Publication No. (SMA) 98-3179.

Miller WR. Consensus Panel Chair. 1999. **Enhancing Motivation for Change in Substance Abuse Treatment.** Treatment Improvement Protocol (TIP) Series 35. DHHS Publication No. (SMA) 99-3354.

Rostenberg PO. Consensus Panel Chair. 1995. **Alcohol and Other Drug Screening of Hospitalized Trauma Patients.** Treatment Improvement Protocol (TIP) Series 16. DHHS Publication No. (SMA) 95-3039.

Siegal H.A Consensus Panel Chair. 1998. **Comprehensive Case Management for Substance Abuse** Treatment. Treatment Improvement Protocol (TIP) Series 27. DHHS Publication No. (SMA) 98-3222.

Sullivan E., Fleming, M. Consensus Panel Co-Chairs. 1997. **A Guide to Substance Abuse Services for Primary Care Clinicians**. Treatment Improvement Protocol (TIP) Series 24. DHHS Publication No. (SMA) 97-3139.

Winters KC. Consensus Panel Chair. 1999. **Treatment of Adolescents With Substance Use Disorders**. Treatment Improvement Protocol (TIP) Series 32. DHHS Publication No. (SMA*)* 99-3283.

An excellent example of a protocol that can guide implementation of a systematic approach to expanding the continuum of care is that developed by the VA/DoD Evidence-Based Clinical Practice Guideline Working Group, Veterans Health Administration, Department of Veterans Affairs, and Health Affairs, Department of Defense (2001). Electronic copies of the guideline are available from: Office of Quality and Performance web site: http://www.oqp.med.va.gov/cpg/SUD/SUD_Base.htm.

The VA/DoD guideline consists of five modules that address inter-related aspects of care for patients with Substance Use Disorders. Module A, Assessment and Management in Primary Care, provides a summary of the evidence base for the use of screening and brief interventions and outlines pathways for referral to specialty treatment.

Module A:	**Assessment and Management in Primary Care** includes screening, brief intervention, and specialty referral considerations.
Module C:	**Care Management** emphasizes chronic disease management for patients unwilling or unable to pursue rehabilitation goals.
Module P:	**Addiction-Focused Pharmacotherapy** addresses use of currently approved medications as part of treatment for alcohol and opioid dependence.
Module R:	**Assessment and Management in Specialty Care** focuses on patients in need of further assessment or motivational enhancement or who endorse rehabilitation goals.
Module S:	**Stabilization** addresses detoxification and pharmacological management of withdrawal symptoms.

The VA/DOD Guidelines and the TIPS are to presented here as examples that may or may not fit a particular State's definition of its continuum of care. New York State has developed its own procedures, as may have other States:

New York State Office of Alcoholism and Substance Abuse Services (New York OASAS). 1996. **Changing Directions: Reference Manual for Early Intervention Services.** Albany NY: New York OASAS.

Brief Intervention Manuals

As noted in the RFA, CSAT has recently supported development and evaluation of manualized brief intervention and brief treatment strategies for adolescents and adults with marijuana use disorders that can be utilized.

Manuals in the Cannabis Youth Treatment (CYT) Series include:

Sample S., and Kadden R. 2002. **Motivational Enhancement Therapy and Cognitive Behavioral Therapy for Adolescent Cannabis Users: 5 Sessions**. Cannabis Youth Treatment (CYT) Series, Volume 1. http://ncadi.samhsa.gov/govpubs/bkd384/

Webb C, Scudder M, Kaminer Y, and Kadden R 2002. **The Motivational Enhancement Therapy and Cognitive Behavioral Therapy Supplement: 7 Sessions of Cognitive Behavioral Therapy for Adolescent Cannabis Users**. Cannabis Youth Treatment (CYT) Series, Volume 2. http://ncadi.samhsa.gov/govpubs/bkd385

Hamilton NL., Brantley LB, Tims FM, Angelovich N., and McDougall B. 2002. **Family Support Network for Adolescent Cannabis Users**. Cannabis Youth Treatment (CYT) Series, Volume 3. http://ncadi.samhsa.gov/govpubs/bkd386/cyt3.pdf

Godley SH., Meyers RJ, Smith JE, Karvinen T, Titus JC, Godley MD., Dent G, Passetti L, and Kelberg P. 2002. **The Adolescent Community Reinforcement Approach for Adolescent Cannabis Users.** Cannabis Youth Treatment (CYT) Series, Volume 4.

Liddle, HA. 2002. **Multidimensional Family Therapy for Adolescent Cannabis Users**, Cannabis Youth Treatment (CYT) Series, Volume 5.

These efforts build on prior research done under the auspices of the National Institute on Drug Abuse (NIDA), the National Institute on Alcoholism and Alcohol Abuse (NIAAA) and the World Health Organization (WHO), which have has also issued several manuals that can also serve as resources in project development:

Babor TF and Higgins-Biddle JF. 2001**. Brief Intervention For Hazardous And Harmful Drinking: A Manual for Use in Primary Car**e. Geneva: World Health Organization. WHO/MSD/MSB/01.6b.

Babor TF, Higgins-Biddle JC, Saunders JB, and Monteiro, MG. 2001. **AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care. Second Edition**. Geneva: World Health Organization. WHO/MSD/MSB/01.6a.

Carroll KM 1998. **A Cognitive-Behavioral Approach: Treating Cocaine Addiction**. National Institute on Drug Abuse Therapy Manuals for Drug Addiction, Manual 1, NIH Publication 98-4308.

Miller WR, Zweben A, DiClemente CC, et al. 1992. **Motivational Enhancement Therapy Manual: A Clinical Research Guide for Therapists Treating Individuals with Alcohol Abuse and Dependence.** NIAAA Project MATCH Monograph Series Vol. 2. DHHS Publication No. (ADM) 92-1894.

National Institute on Alcohol Abuse and Alcoholism (NIAAA) 1995. **The Physicians' Guide to Helping Patients With Alcohol Problems**. NIH Publication No. 95-3769.

National Institute on Alcohol Abuse and Alcoholism (NIAAA) 2003. **Helping Patients with Alcohol Problems: A Health Practitioner's Guide**. NIH Publication No. 03-3769. Bethesda, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health.

Roberts LJ and McCrady BS 2002. **Alcohol Problems in Intimate Relationships: Identification and Intervention - A Guide for Marriage and Family Therapists**. Rockville MD: National Institute on Alcohol Abuse and Alcoholism.

Resources for Analyzing Barriers and Implementing Systems Change

Additional resources for analyzing barriers to access and linkage between the generalist and specialist agencies and devising policy changes are provided by CSAT Technical Assistance Publications (TAPs). TAPS are publications, manuals, and guides developed by CSAT to offer practical responses to emerging issues and concerns in the substance abuse treatment field. Each TAP is developed by an expert who has had firsthand experience with the topic. TAPS can be accessed on the internet through the Treatment Improvement Exchange at: http://www.treatment.org/Taps/

TAPS that may be useful resources include:

Crowe AH. and R Reeves. 1994. **Treatment for Alcohol and Other Drug Abuse: Opportunities for Coordination**. Technical Assistance Publication (TAP) Series 11.DHHS Publication No. (SMA) 94-2075.

Hansen C. 1995. **Forecasting the Cost of Chemical Dependency Treatment Under Managed Care: The Washington State Study**. Technical Assistance Publication (TAP) Series 15. DHHS Publication No. (SMA) 95–3045).

Moss S. 1998. **Contracting for Managed Substance Abuse and Mental Health Services: A Guide for Public Purchasers.** CSAT Technical Assistance Publication Series, Number 22.
http://www.treatment.org/taps/tap22/TAP22TOC.htm

Other publications that can be used to understand development of cost estimates, financing analyses, and systems change strategies are.

Broskowski A and Smith S. 2001. **Estimating the Cost of Preventive Services in Mental Health and Substance Abuse Under Managed Care**. Substance Abuse and Mental Health Services Administration.
http://www.mentalhealth.org/publications/allpubs/SMA-02-3617R/appendix.asp

Denmead G and Rouse BA (eds) 1994. **Financing Drug Treatment Through State Programs.** Services Research Monograph No1. NIH Publication No.94-3543. Rockville MD: National Institute on Drug Abuse.

Fleming MF, Mundt MP, French MT, Manwell LB, Stauffacher EA, Barry KL 2000. Benefit-cost analysis of brief physician advice with problem drinkers in primary care settings. *Med Care* 38(1): 7-18.

French MT, et al. 2001. Using the drug abuse screening test to analyze health services utilization and cost for substance users in a community-based setting (DAST-10). *Substance Use and Misuse* 36(6-7): 927-46.

Fortney J and BM Booth. 2001. Access to substance abuse services in rural areas. In Galanter M (ed). **Recent Developments in Alcoholism: Volume 15. Services Research in the Era of Managed Care**. New York: Plenum Press, pp. 177-197.

Horgan CM. and EL Merrick. 2001. Financing of substance abuse treatment services. In Galanter M (ed) Recent Developments in Alcoholism: Volume 15. **Services Research in the Era of Managed Care**. New York: Plenum Press, pp. 229-252.

Libertoff K 1999. **Fighting for Parity in an Age of Incremental Health Care Reform**. Montpelier VT: Vermont Association for Mental Health.

McCrady BS and Langenbucher JW. 1996. Alcohol treatment and health care system reform. *Archives of General Psychiatry*, 53(8): 737-746.

National Association of State Alcohol and Drug Abuse Directors (NASADAD). 2002. **Identification and Description of Multiple Alcohol and Other Drug Treatment Systems.**

Physician Leadership on National Drug Policy (PLNP). 2000. **Position Paper on Drug Policy.** Providence RI: Brown University Center for Alcohol and Addiction Studies
http://www.caas.brown.edu/plndp/Resources/researchrpt.pdf

Weisner C. 1992. The Merging of Alcohol and Drug Treatment: A Policy Review. *Journal of Public Health Policy* 13(1): 66-80.

Weisner C, Mertens J, Parthasarathy S, Moore C, and Lu Y. 2001. Integrating Primary Medical Care with Addiction Treatment: A Randomized Controlled Trial. *Journal of the American Medical Association* 286(14): 1715-1723.

Weisner C, and Schmidt L. 1993. Alcohol and drug problems among diverse health and social service populations. *American Journal of Public Health* 83:824-829.

Weisner C and Schmidt L 2001. Rethinking access to alcohol treatment. In Galanter M. (ed). **Recent Developments in Alcoholism: Volume 15. Services Research in the Era of Managed Care**. New York: Plenum Press, pp. 107-135.

Weisner C, Matzger H, Tam T, and Schmidt L. 2002. Who goes to alcohol and drug treatment? Understanding utilization within the context of insurance. *J. Stud. Alcohol* 63**:** 673-682.

Zarkin GA, Galinis DN, French MT. Fountain DL, Ingram PW, and Guyett JA. 1995. Financing strategies for drug abuse treatment programs. 1995. Journal of *Substance Abuse Treatment*. 12(6): 385-399.

Additional articles that address strategies for overcoming resistance and implementing systems change include:

> Babor TF and Higgins-Biddle JF. 2000. Alcohol screening and brief intervention: dissemination strategies for medical practice and public health. *Addiction.* 95(5): 677-686.
>
> Lock CA and Kaner E 2000. Use of Marketing to Disseminate Brief Alcohol Intervention to General Practitioners: Promoting Health Care Interventions to Health Promoters. *Journal of Evaluation in Clinical Practice*. 6(4): 345-357.
>
> Fleming MF. 2002. Screening, Assessment, and Intervention for Substance Use Disorders in Settings. In: ***Strategic Plan for Interdisciplinary Faculty Development: Arming the Nation's Health Professional Workforce for a New Approach to Substance Use Disorders*.** Providence RI: Association for Medical Education and Research in Substance Abuse (AMERSA). http://www.projectmainstream.net/mainstream/supportdata/part1.pdf
>
> Physician Leadership on National Drug Policy (PLNP). 2002**. Project Vital Sign.** Providence RI: Brown University Center for Alcohol and Addiction Studies.

The emphasis in this RFA is on expanding the State's continuum of care to include screening, brief intervention, referral, and brief treatment (SBIRT) in general medical settings. It is recognized that SBIRT activities are being, or could be, carried out in non-medical community settings (viz., student assistance programs, employee assistance programs, and welfare offices, drug courts, senior citizen centers).

While most of the research has been focused on screening in primary care medical settings, the approach can be effectively applied in many other contexts as well. In many cases, procedures have already been developed and used in these community settings for specific instruments, such as the AUDIT. To provide an example, Table 5 summarizes information about the settings, screening personnel, and target groups considered appropriate for a screening program using the a screening instrument.

Table 5: Personnel, Settings and Groups Considered Appropriate for a Screening Program Using Screening Instruments[8]		
Setting	**Target Group**	**Screening Personnel**
Primary care clinic	Medical patients	Nurse, social worker
Physician's office Surgery Prenatal and perinatal clinics	Medical patients	General practitioners, family physicians, physician extenders, nurses, or staff
General Hospital wards Outpatient clinic	Patients with hypertension, heart disease, gastrointestinal or neurological disorders	Internists, physician extenders, nurses, staff
Psychiatric hospital	Psychiatric patients, particularly those who are suicidal	Psychiatrists, psychologists, counselors, staff
Court, jail, prison	DWI offenders, violent criminals	Officers, counselors, probation officers
Other health-related facilities	Persons demonstrating impaired social or occupational functioning (e.g. marital discord, child neglect, etc.)	Health and human service workers
Military Services	Enlisted men and officers	Medics
Welfare Offices	Applicants and clients	Social Workers, case aides
Workplace Employee Assistance Program	Workers, especially those having problems with productivity, absenteeism or accidents	Employee assistance staff

A State could include such efforts in their proposal but must recognize these efforts must comport to the diagnostic considerations outlined here. Examples of such activities can be found in these and other publications:

> Inciardi JA Consensus Panel Chair 1994. **Screening and Assessment for Alcohol and Other Drug Abuse Among Adults in the Criminal Justice System.** Treatment Improvement Protocol (TIP) Series 7. DHHS Publication No. (SMA) 94B2076
>
> White WL and Dennis M. 20002. The cannabis youth treatment experiment: Key lessons for student assistance programs. *Student Assistance Journal*, 14: 16-19.

[8] Modified from Box 1, Personnel, Settings and Groups Considered Appropriate for a Screening Programme Using the AUDIT (Babor et al., 2001).

Young, N. K. 1996. **Alcohol and Other Drug Treatment: Policy Choices in Welfare Reform**. Washington DC: National Association of State Alcohol and Drug Abuse Directors.

Young N. K., S. L. Gardner, and K. Dennis. 1998. **Responding to Alcohol and other Drug Problems in Child Welfare: Weaving Together practice and Policy**. Washington DC: Child Welfare League of America Press.

Young NK and Gardner SL. 2002. **Navigating the Pathways: Lessons and Promising Practices in Linking Alcohol and Drug Services with Child Welfare**. . Technical Assistance Publication (TAP) Series 27. SAMHSA Publication No. (SMA) 02–3639.

Resources for Developing Need Estimates

Resources that can be referred to for developing estimates of need for treatment and resource availability are:

DeWit DJ and Rush B 1996. Assessing the Need for Substance Abuse Services: A Critical Review of Needs Assessment Models. *Evaluation and Program Planning*. 19(1): 41-64.

Epstein JF 2002. **Substance Dependence, Abuse, and Treatment: Findings from the 2000 National Household Survey on Drug Abuse** (*DHHS Publication No. SMA 02-3642, NHSDA Series A-16*). Rockville MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies

Gerstein D and Harwood H (eds). 1990. **Treating Drug Problems**, Vol. I. Washington DC: National Academy Press. (Chapter 3)

Institute of Medicine. 1990. **Broadening the Base of Treatment for Alcohol Problems**. Washington DC: National Academy Press. (Chapters 7 and 9)

Maxwell JC (ed). 2001. **Multiple Indicator Analysis: Using Secondary Data to Analyze Illicit Drug Use**. DHHS Publication No. (SMA) 01-3539. Rockville, MD: Center for Substance Abuse Treatment and Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

McAuliffeWE, Woodworth R, Zhang CH, and Dunn, RP. 2002. Identifying substance abuse treatment gaps in substate areas. J. *Substance Abuse Treatment*. 23(3): 199-208.

Office of Applied Studies. 2002. **National and State Estimates of the Drug Abuse Treatment Gap: 2000 National Household Survey on Drug Abuse** *(NHSDA Series H-14, DHHS Publication No. SMA 02-3640)*. Rockville, MD:

Substance Abuse and Mental Health Services Administration. http://www.samhsa.gov/oas/TXgap/toc.htm

Rush B. 1996. Alcohol and other drug problems and treatment systems: A framework for research and development. *Addiction*. 91(5): 629-642.

Collaboration with Addiction Technology Training Centers as a Training Resource

SAMHSA/CSAT funds a network of 14 independent regional Addiction Technology Transfer Centers (ATTCs) and a National Office (http://www.nattc.org). The ATTCs constitute a nationwide, multi-disciplinary resource that draws upon the knowledge, experience and latest work of recognized experts in the field of addictions. A list of ATTCs, the States covered, and contact information is provided in Table 5. Each ATTC serves as a resource to 2 or more States, having memoranda of understanding with the State Substance Abuse Authorities (SSAs).

Table 5:Addiction Technology Transfer Center Contacts

Maine, New Hampshire, Vermont, *Massachusetts, Connecticut, Rhode Island* ATTC of New England Center for Alcohol and Addiction Studies Brown University Providence, Rhode Island 02912 (401) 444-1808 www.attc-ne.org Director: Susan Storti, PhD, RN	**Georgia, South Carolina** Southeast ATTC Morehouse School of Medicine CORK Institute Atlanta, Georgia 30310 (404) 756-5742 www.sattc.org Director: Wyeuca Johnson, LCSW, ACSW
New York, New Jersey, Pennsylvania Northeast ATTC Institute for Research, Education and Training in Addictions Pittsburgh, Pennsylvania 15219 (866) 246-5344 www.ireta.org/attc Director: Michael Flaherty, PhD	*Virginia, Maryland, North Carolina, West Virginia* Mid-Atlantic ATTC Virginia Commonwealth University Richmond, Virginia 23298-0469 (804) 828-9910 www.mid-attc.org Director: Paula Horvatich, PhD
District of Columbia, Delaware, Kentucky, Tennessee, Maryland Central East ATTC DANYA Institute Silver Spring, Maryland 20910 (240) 645-1145 www.ceattc.org Director: Linda Kaplan, MA	**Illinois, Ohio, Wisconsin, Indiana, Michigan** Great Lakes ATTC Jane Addams College of Social Work University of Illinois-Chicago Chicago, Illinois 60612 (312) 996-1373 www.glattc.org Director: Lonnetta Albright

Iowa, Nebraska, North Dakota, South Dakota, Minnesota
Prairielands ATTC
University of Iowa
Iowa City, Iowa 52242
(319) 335-5368
www.pattc.org
Director: Anne Helene Skinstad, PhD

Nevada, Montana, Wyoming, Utah, Colorado
Mountain West ATTC
University of Nevada, Reno
Reno, Nevada 89557
(775) 784-6265
www.mwattc.org
Principal Investigator: Nancy Roget, MS
Co-PI: Gary L. Fisher, PhD

Alaska, Washington, Oregon, Idaho, Hawaii, Pacific Islands
Northwest Frontier ATTC
Salem, Oregon 97303
(503) 373-1322
www.nfattc.org
Director: Steve Gallon, PhD

Texas, Louisiana, Mississippi
Gulf Coast ATTC
University of Texas
Center for Social Work Research
Austin, Texas 78703
(512) 232-0616
www.utattc.net
Director: Richard Spence, PhD

California, Arizona, New Mexico
Pacific Southwest ATTC
UCLA Integrated Substance Abuse Programs
Los Angeles California 90025
(310) 312-0500
http://www.psattc.org/
Director: Thomas Freese, PhD
Co-Director: Michael Shafer, PhD

Puerto Rico, US Virgin Islands
Caribbean Basin and Hispanic ATTC
Centro de Estudios en Adiccion
Universidad Central del Caribe
Call Box 60-327
Bayamon, Puerto Rico 00960-6032
(787) 785-4211
web http://cbattc.uccaribe.edu/
Director: Rafaela Robles, EdD

Alabama, Florida
Southern Coast ATTC
Florida Certification Board
Tallahassee Florida 32301
(850) 222-6731
www.scattc.org
Director: Pam Waters

National Office
University of Missouri - Kansas City
Kansas City, MO 64110-2499
(816) 482-1200
http://www.nattc.org/
Director: Mary Beth Johnson, MSW